Transmission Services Charging:
Future Developments and High-Level Analysis

NTSCMF Discussions

July 2024

Transmission Services Review: Agenda

- Overview
- High Level Entry/Exit split analysis
- Consumer benefits / Relevant Objectives reflections
- Next Steps

Transmission Services: Review

- At June's NTSCMF, we discussed interpretation and considerations of the Consumer Benefits in discussing the Entry/ Exit split and its part in Transmission Services charging.

- Thank you for your input.

This month:

  - To re-visit our initial analysis, updating with 2024/25 inputs, and highlight modelling assumptions

  - To consider key relevant and charging relevant objectives/ Consumer benefits for the following high-level options:

    1. Do nothing - maintain the status quo of 50/50 split
    2. Amend Entry /Exit split so exit takes a higher proportion of the revenue split
    3. Amend Entry /Exit split so entry takes a higher proportion of the revenue split

- **Please share your thoughts and feedback with us throughout**; your input is vital. Our contact details can be found in the pack if you would like to speak to us outside of NTSCMF.

Transmission Services Charging:
Future Developments

NTSCMF Discussions: High Level Entry/ Exit Split Analysis

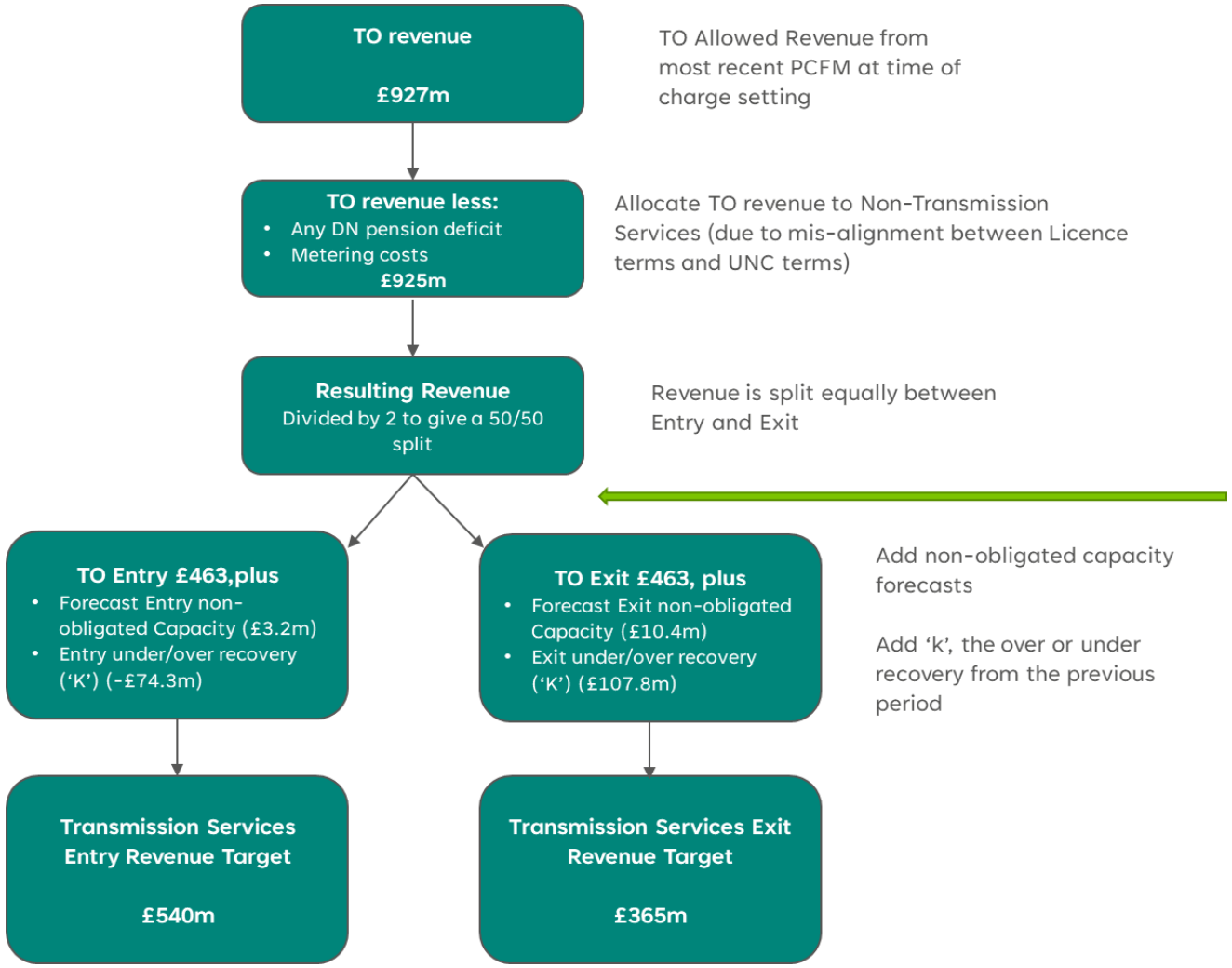
July 2024

Transmission Services: Entry/ Exit Split Analysis

- Overview of current arrangements
- Analysis: Aims and Assumptions
- Entry /Exit Split modelling:
    - Allowed Revenues
    - Gas Year Revenues
    - 2024/25 Prices
    - Indicative forward prices
    - Impact on Conditional NTS Capacity Charge Discount (CNCCD, shorthaul)

Transmission Services Revenue: Overview

- Ofgem set the target revenue we can recover. This is split in to two distinct revenue streams; Transmission Owner (TO) and System Operator (SO)
- Transmission Services Revenue broadly aligns to the TO revenue stream. Any TO revenue associated with Non-Transmission services is reallocated.
- The resulting revenue is then split between Transmission Services Entry and Transmission Services Exit. The split is 50:50, as determined by UNC, TPD, Y, 1.5.3
- Although the percentage of revenue may be the same, **the prices for entry and exit capacity differ**:
  - This is due to the volume of capacity at exit points
  - Will still be the case when EC expire



Analysis: Aims and Assumptions (1/2)

Demonstrate price sensitivity to various changes to the Entry/ Exit apportionment

- Prices Entry/Exit based on 0/100*, 25/75, 50/50 (status quo), 75/25. We have chosen these to help provide some ranges for reference, not based on any preference.
    - *N.B. Accommodating Existing Contracts as we have in this assessment, means 0/100 is not possible – if 0/100 was to be achieved further thinking on Existing Contracts would be required.
- Analysis based on Gas Year 2024/25 inputs (as existing methodology)
- Isolate sensitivity – 'K' – under / over recovery is not included
    - Assumed no over/under recovery as this will mask impact (this is because the level of 'k' changes)

Analysis: Aims and Assumptions (2/2)

Demonstrate price sensitivity to various changes to the Entry: Exit apportionment

- ‘Normalised’ 6 months prior revenue recovery (Rpt in the model)
  - For RY 24/25 anticipated revenue recovery for the first six months (Apr-Oct 24) is based on the previous GY prices, which would have been based on a 50/50 split. If we are modelling a proportion change, we need to account that there would be a corresponding change to this. For modelling purposes, as a starting point we have applied the average Seasonal Allocation Factor (Fry) to the Target Revenue.
- For simplicity, an average Seasonal Allocation Factor (Fry) has been applied across the Gas Year modelling
- For simplicity, forecasts for non-obligated capacity remain unchanged
- Any feedback on these assumptions will help us to help us refine and focus this analysis, adapt and ensure relevance to Stakeholders in ways of sharing the outputs

Transmission Services Revenues

Existing methodology:

	2024/25	2025/26	2026/27
TO Allowed Revenue	927.27	1166.42	1201.42
DN Pension	0.00	0.00	0.00
Meter Maintenance	1.91	1.97	2.03
Target (excl 'K')	925.36	1164.45	1199.39
50/50 split	462.68	582.23	599.69
Entry Non-Ob	3.21	3.21	3.21
Entry 'K'	-74.26	0.00	0.00
Tx Entry Target	**540.16**	**585.44**	**602.91**
Exit Non-Ob	10.38	10.38	10.38
Exit 'K'	107.79	0.00	0.00
Tx Exit Target	**365.27**	**592.61**	**610.07**

Existing split with revised assumptions:

	2024/25	2025/26	2026/27
TO Allowed Revenue	927.27	1166.42	1201.42
DN Pension	0.00	0.00	0.00
Meter Maintenance	1.91	1.97	2.03
Target (excl 'K')	925.36	1164.45	1199.39
50/50 split	462.68	582.23	599.69
Entry Non-Ob	3.21	3.21	3.21
Entry 'K'	**0.00**	0.00	0.00
Tx Entry Target	**465.90**	**585.44**	**602.91**
Exit Non-Ob	10.38	10.38	10.38
Exit 'K'	**0.00**	0.00	0.00
Tx Exit Target	**473.06**	**592.61**	**610.07**

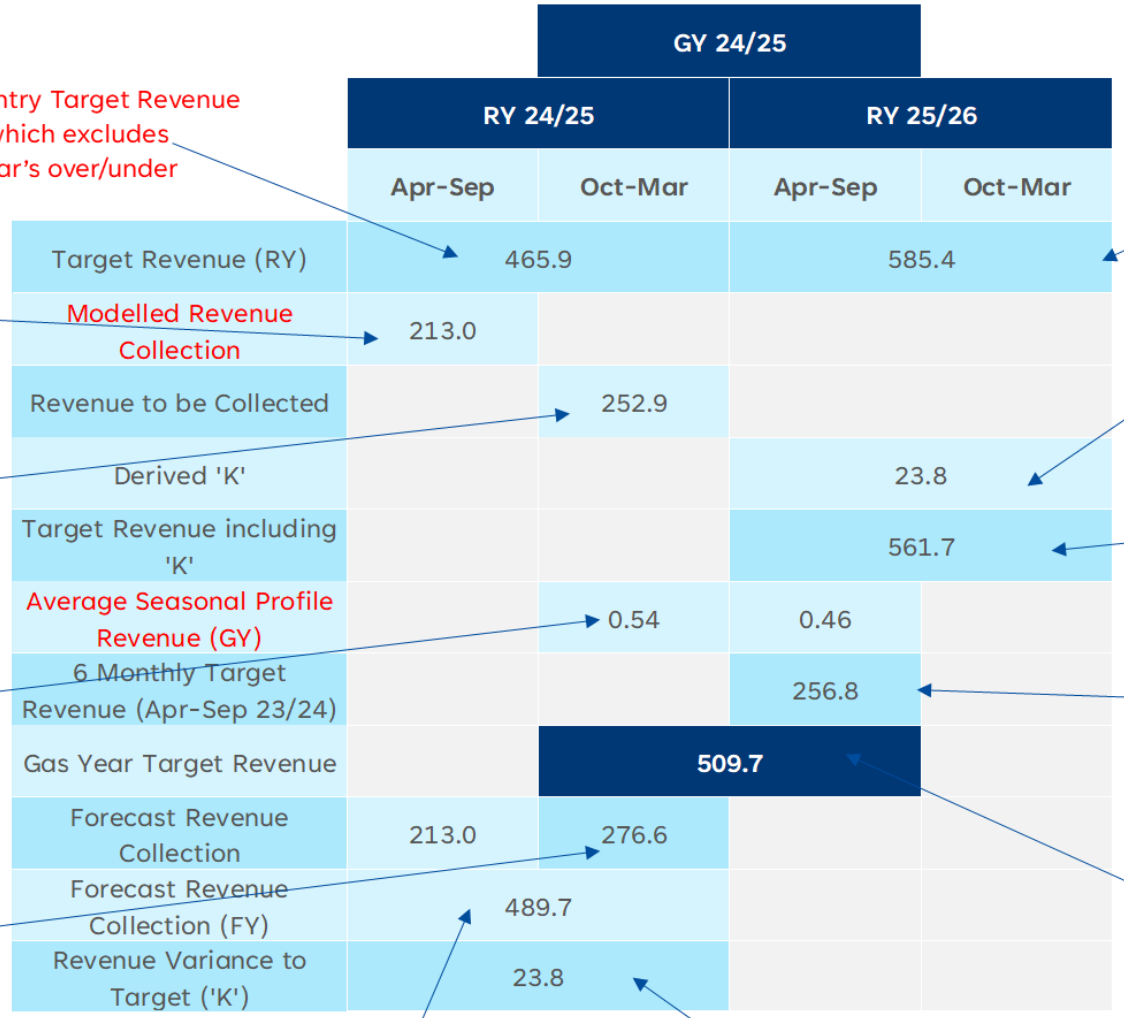
Revised Allowed Revenues: Regulatory Year

The table below shows the output revenues for the Regulatory Year with the revised assumptions as highlighted in the previous slides for the four main scenarios.

	2024/25			2025/26			2026/27			2027/28		
Split	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
75/25	697.24	241.72	938.96	876.56	301.49	1178.05	902.76	310.23	1212.98	929.74	319.22	1248.96
50/50	465.90	473.06	938.96	585.44	592.61	1178.05	602.91	610.07	1212.98	620.90	628.07	1248.96
25/75	234.56	704.40	938.96	294.33	883.72	1178.05	303.06	909.92	1212.98	312.06	936.91	1248.96
5/95*	46.27	892.69	938.96	57.40	1120.65	1178.05	59.02	1153.96	1212.98	60.70	1188.27	1248.96

* **Note:** 4.653% is the lowest that can be modelled due to the value of existing contracts.

Gas Year Example (Entry, 50%)



	GY 24/25			
	RY 24/25		RY 25/26	
	Apr-Sep	Oct-Mar	Apr-Sep	Oct-Mar
Target Revenue (RY)	465.9		585.4	
Modelled Revenue Collection	213.0			
Revenue to be Collected		252.9		
Derived 'K'			23.8	
Target Revenue including 'K'			561.7	
Average Seasonal Profile Revenue (GY)		0.54	0.46	
6 Monthly Target Revenue (Apr-Sep 23/24)			256.8	
Gas Year Target Revenue		509.7		
Forecast Revenue Collection	213.0	276.6		
Forecast Revenue Collection (FY)	489.7			
Revenue Variance to Target ('K')	23.8			

*For the purposes of modelling, this is calculated by multiplying the modelled target entry revenue by the average Seasonal Profile Revenue

Revised Target Allowed Revenues: Gas Year

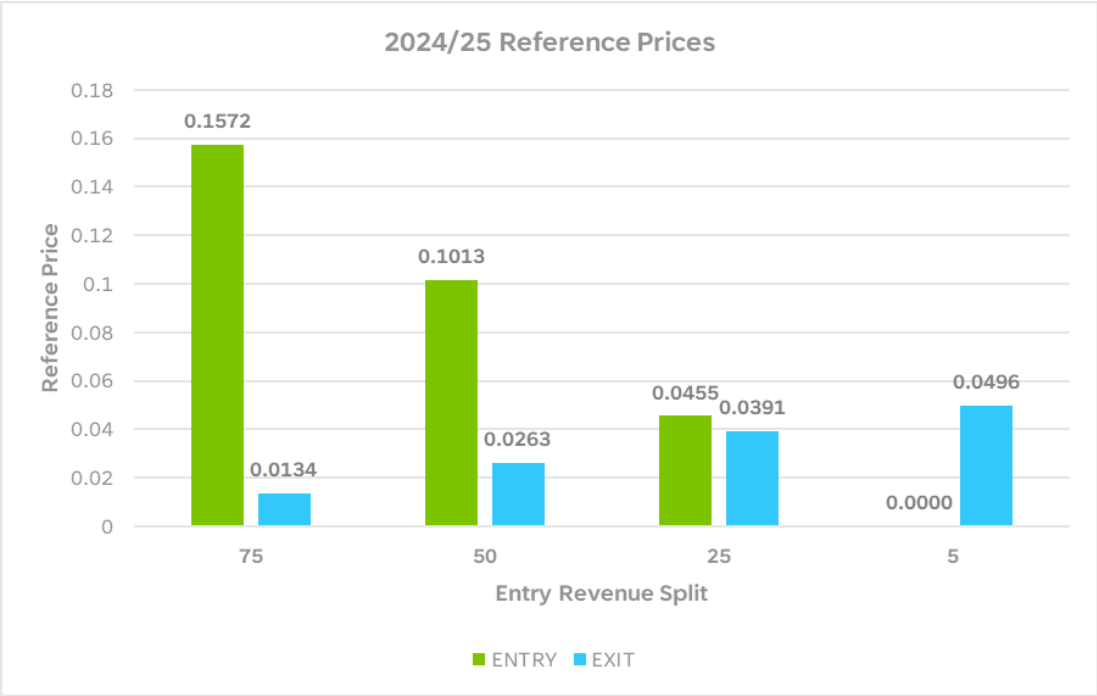
The table below shows the output Gas Year Allowed Revenues for the four revenue split scenarios. These revenues have then been used to calculate the Entry and Exit reference prices

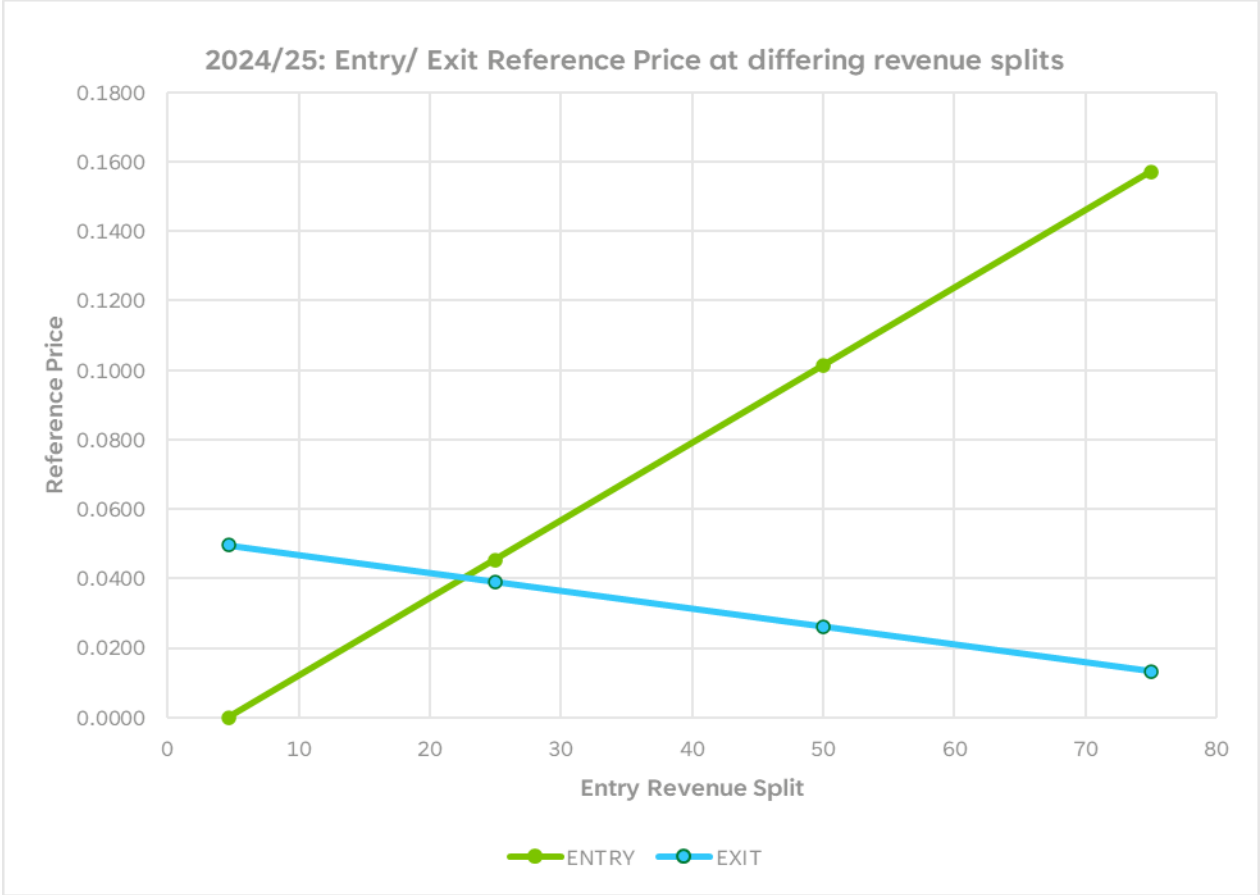
	2024/25			2025/26			2026/27			2027/28		
Split	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
75/25	762.93	265.40	1028.33	905.19	312.04	1217.22	912.23	313.44	1225.67	942.86	324.03	1266.89
50/50	509.69	520.43	1030.12	604.53	613.69	1218.22	609.23	616.49	1225.72	629.64	637.68	1267.32
25/75	256.45	775.45	1031.90	303.87	915.35	1219.22	306.22	919.55	1225.77	316.43	951.33	1267.76
5/95*	50.35	983.01	1033.36	59.17	1160.86	1220.03	59.61	1166.20	1225.81	61.51	1206.60	1268.11

* **Note:** 4.653% is the lowest that can be modelled due to the value of existing contracts

- The output Entry and Exit prices are shown on the next slide

Price Impact 2024/25





- **Note 1:** 4.65% is the lowest that can be modelled due to the value of existing contracts
- **Note 2**: At a revenue split of 22.7/ 77.3%, Entry and Exit prices are equal for GY 24/25 at 0.0403
- **Note 3:** Every percentage change to entry split leads to a c. 0.0022 change to entry prices and a c. 0.0005 change to exit prices

Price Impact – indicative forward prices

75/25	2024/25	2025/26	2026/27	2027/28	2028/29
Entry	0.1572	0.1932	0.1679	0.1747	0.1581
Exit	0.0134	0.0158	0.0160	0.0168	0.0174

Baseline

50/50	2024/25	2025/26	2026/27	2027/28	2028/29
Entry	0.1013	0.1257	0.1098	0.1151	0.1047
Exit	0.0263	0.0311	0.0315	0.0330	0.0343

25/75	2024/25	2025/26	2026/27	2027/28	2028/29
Entry	0.0455	0.0581	0.0516	0.0554	0.0514
Exit	0.0391	0.0463	0.0470	0.0493	0.0512

5/95	2024/25	2025/26	2026/27	2027/28	2028/29
Entry	0.0000	0.0032	0.0043	0.0069	0.0080
Exit	0.0496	0.0588	0.0596	0.0625	0.0650

Impact on Conditional NTS Capacity Charge Discount (CNCCD, Shorthaul) 2024/25

The CNCCD is a percentage discount applied to the reserve price (TPD, Y, paragraph 5)
The table highlights CNCCD based on October 24/25 pricing models, updated with the assumptions as per slides 7-8
Please note that CNCCD is an estimate based on forecasted capacity

	Entry			Exit			Total Discount
Split	CNCCD Revenue	Full Cost	Discount	CNCCD Revenue	Full Cost	Discount	
75/25	£10.4m	£50.5m	£40.1m	£1.5m	£6.4m	£4.9m	£45.0m
50/50	£6.7m	£32.6m	£25.8m	£2.9m	£12.5m	£9.6m	£35.4m
25/75	£3.0m	£14.6m	£11.6m	£4.4m	£18.7m	£14.3m	£25.9m
5/95	£0.0m	£0.0m	£0.0m	£5.5m	£23.7m	£18.1m	£18.1m

- If entry prices go down, the associated CNCCD discount will reduce.
- As a consequence, exit prices increase
  - The associated exit CNCCD increases, although this is to a lesser degree as exit prices are less sensitive to a change in percentage split of revenues

Transmission Services Charging:
Future Developments

NTSCMF Consumer Benefits, Relevant & Charging Relevant Objectives

July 2024

Consumer Benefits, Relevant Charging Objectives, and Relevant Objectives

We have captured the main discussion points to re-visit the key take-aways from the Consumer Benefits, Relevant Charging Objectives and Relevant Objectives.

We welcome feedback and views, in particular any further thoughts following the updated analysis.

When discussing these areas, consider the following options:

1. Do nothing - maintain the status quo of 50/50 split
2. Amend Entry /Exit split so exit takes a higher proportion of the revenue split
3. Amend Entry /Exit split so entry takes a higher proportion of the revenue split

Consumer Benefit Areas

Improved safety and reliability

Considerations for Entry/ Exit Split	Discussion Summary
Don't believe the Entry/Exit split arrangements will have an impact on safety or reliability. One view is that UK is less attractive destination because of high entry prices, but this requires further thought for national Security of Supply	Workgroup disagreed: this cannot be determined as changes to the Entry/Exit Split may have an impact on consumer procurement behaviour and impact their operations. For example, less inclined to buy capacity in long-term auctions if exit prices increase. This could impact Security of Supply for electricity

Consumer Benefit Areas

Lower bills than would otherwise be the case (slide 1 of 2)

Considerations for Entry/ Exit Split	Discussion Summary
What impact would a change to the entry/exit split have on consumer bills? • Impacts of a larger Exit proportion and why • Impacts of a larger Entry proportion and why • What assumptions do stakeholders make when considering these impacts? • Considerations: Price of gas, savings/costs passed to consumers, impacts on different consumer groups, effects of the increase in one tariff and a decrease in the other.	Key consideration is to split consumer groups and assess impacts on each as opposed to collectively. Aggregate charge impacts need to be considered: if entry charges are reduced, the exit charges do not go up by the same amount. If a shipper is transporting gas across the NTS the aggregate charge is lower and this could encourage more transit gas shipping. Capacity booking strategies need to be considered; although it may appear that a change to entry leads to a corresponding smaller change to exit, exit has a much larger base. Booking behaviour needs to be assessed under each consumer group – users are not buying the same amount of capacity and commodity

Consumer Benefit Areas

Lower bills than would otherwise be the case (slide 2 of 2)

Considerations for Entry/ Exit Split	Discussion Summary
What impact would a change to the entry/exit split have on consumer bills? • Impacts of a larger Exit proportion and why • Impacts of a larger Entry proportion and why • What assumptions do stakeholders make when considering these impacts? • Considerations: Price of gas, savings/costs passed to consumers, impacts on different consumer groups, effects of the increase in one tariff and a decrease in the other.	Marginal costs impacts need to be considered such as electricity, landing gas etc. How entry prices impact NBP need to be considered and understood If throughput does change as a result of a change in split, it will have an effect on the aggregate charge. Need to understand the effect on utilisation either due to increased use in GB or exports to other markets

Consumer Benefit Areas

Reduced environmental damage

Considerations for Entry/ Exit Split	Discussion Summary
Don’t believe the Entry Exit split arrangements impacts on this area	Flow changes could result in increased/ decreased compressor usage

Consumer Benefit Areas

Improved quality of service

Considerations for Entry/ Exit Split	Discussion Summary
Don’t believe the Entry Exit split arrangements impacts on this area	No further comments from workgroup.

Consumer Benefit Areas

Benefits for society as a whole (slide 1 of 3)

Considerations for Entry/ Exit Split	Discussion Summary
Impacts on overall economy: • Would a change lead to economies of scale and increased throughput? • Would competition be enhanced for non-domestic customers? • Could a change make GB a more attractive place to land gas? • Impacts on the electricity market? • Impact on stability/volatility of the tariffs and subsequent consumer impacts	Increased throughput should lead to a reduction in transportation charges, and from a theoretical perspective, it reduces total charges. However, it was highlighted that a decline in gas demand is expected to continue. Given NetZero, do we want to encourage demand? Competition is unlikely to be enhanced due to Postage Stamp methodology. However, could depend on if you see a reduction in NBP price which compensates for an increase to Exit charges If looking at competition globally, lower charges for GB manufacturers could make them more competitive. Concern regarding considering entry/ exit price in isolation. Gas prices are high and volatile; transportation costs account for a small proportion of total cost. Perspective is needed regarding the impact of the change to customers in terms of the total costs they are paying.

Consumer Benefit Areas

Benefits for society as a whole (slide 2 of 3)

Considerations for Entry/ Exit Split	Discussion Summary
Impacts on overall economy: • Would a change lead to economies of scale and increased throughput? • Would competition be enhanced for non-domestic customers? • Could a change make GB a more attractive place to land gas? • Impacts on the electricity market? • Impact on stability/volatility of the tariffs and subsequent consumer impacts	It was noted that a couple of pence difference is unlikely to divert LNG cargo. Each entry point has its own drivers. From an LNG perspective, UK would be more attractive if entry is reduced, however, hard to say how much difference would be made 2-3% is still a significant figure in helping decide where a cargo wishes to land. However, it was also noted that the absolute cost for gas may outweigh the reduction in entry prices and the costs in other markets. Concern was raised regarding creating something to attract more LNG; it may mean treating customers differently. There could be winners and losers – each group needs to be considered. Reducing charges may be beneficial to certain groups There may be that specific work can be done on different types of suppliers' relation to costs

Consumer Benefit Areas

Benefits for society as a whole (slide 3 of 3)

Considerations for Entry/ Exit Split	Discussion Summary
Impacts on overall economy: • Would a change lead to economies of scale and increased throughput? • Would competition be enhanced for non-domestic customers? • Could a change make GB a more attractive place to land gas? • Impacts on the electricity market? • Impact on stability/volatility of the tariffs and subsequent consumer impacts	An impact on the electricity market would depend on there being a reduction in the NBP. If prices for generation go up, they could get passed on to electricity customers. Existing contracts would only have a short-term impact, as any change would be applicable from Oct 26. The impacts of the Existing contacts will reduce over time. Cross-subsidy issue in respect of Existing contract holders. A change in pricing could lead to a change in booking behaviour. Therefore, a straightforward comparison of prices does not/ may not show the whole picture as booking strategy may change.

Relevant Charging Objectives

c) That, so far as is consistent with sub-paragraphs (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers;

Our Understanding/ interpretation	Considerations for Entry/ Exit Split	Discussion Comments
Competition is considered effective if there are no significant barriers to access products and services – there is a level playing field. In terms of the Charging Methodology, considerations may include: • Capacity auction/ allocation process • Charging structure and timeliness of publication of charges • Data and information • Discounts	• How does the status quo promote competition from a pricing perspective? • Are there currently any pricing barriers to the network? • How sensitive are shippers to price when considering GB as a place to land gas? • Should we have the same pricing methodology for all connection points? • What is the right amount Entry should pay? What is the right amount exit should pay? (currently entry prices higher than for exit) • Can pricing arrangements impact security of supply?	• Competitiveness of GB and security of supply is not a relevant objective – this is government's remit. • There is anecdotal evidence that traders have referenced entry costs being a barrier • This objective is around fairness and equity between shippers. Prices should not drive competition but facilitate it. Charges should be fair, equitable, transparent & predictable. • Need to consider (if possible) the impact on NBP prices. Does a change to entry/ exit split lead to a shift in the NBP

Relevant Charging Objectives

b) That, so far as is consistent with sub-paragraph (a), the charging methodology properly takes account of developments in the transportation business;

Our Understanding/ interpretation	Considerations for Entry/ Exit Split	Discussion Comments
Does the charging methodology recover charges as intended. This could include considerations around the patterns of use of the NTS, as well as external factors such as gas price volatility This could also include updating alongside Licence conditions, expectations or obligations.	Have there been any developments in the transportation business that we need to consider that can be addressed by the entry/ exit split? Are there any external factors that require consideration (e.g. development of LNG facilities across EU, GB competitiveness compared to other countries)	• Since the 50/50 split has been in place, there has been a shift in how GB operates. The historic beach to meter and patterns of supply have changed significantly. • This is a very relevant objective in relation to the entry/exit split • Compliance with EU TAR will be key

Relevant Charging Objectives

aa) That, in so far as prices in respect of transportation arrangements are established by auction, either:
no reserve price is applied, or
that reserve price is set at a level -
(I) best calculated to promote efficiency and avoid undue preference in the supply of transportation services; and
(II) best calculated to promote competition between gas suppliers and between gas shippers;

Our Understanding/ interpretation	Considerations for Entry/ Exit Split	Discussion Comments
For Transmission Services, prices are calculated using a 'top-down' approach. The Allowed Revenue for Transmission services is split equally between Entry and Exit. FCC, volume of existing contracts, and discounts then drive the capacity reference prices. This objective is looking at the auction process. If you change the entry/ exit split, prices are calculated in the same way as per the current methodology. It is the apportionment of revenue that will (potentially) change	This objective could be considered neutral if we are just looking at amending the entry/ exit split. However, there are consequences to this that may need further thought: • Would an amended split lead to changes in booking behaviour or increased/ decreased throughput / impacts to competition for capacity / impacts to prices & premiums? • Could reserve price changes lead to impacts on Existing Contracts? • Any general implications for auction related processes if prices were to reduce significantly? • Incentive to purchase capacity & Overrun implications	• There is an association between a change in price and a change in behaviour. However, the impacts would be difficult to assess accurately • Existing contracts cannot be cancelled/ returned • Implications regarding Ofgem assessments and difficulty in proving theory quantitively.

Relevant Charging Objectives

a) Save in so far as paragraphs (aa) or (d) apply, that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;

Our Understanding/ interpretation	Considerations for Entry/ Exit Split	Discussion Comments
As set out in SC A5 of the Licence, the charging methodology results in charges which permit NGT to make reasonable profit and no more from its Transportation business. The current methodology can be viewed as a revenue recovery model as opposed to cost recovery model (which does not explicitly match the wording of the relevant objective). We have access tariffs (capacity) and use of network tariffs (commodity charges). Does not include connection charges, or some development stages (e.g. PARCAs)	Ofgem set the amount of Allowed Revenue (via the price control funding model) we can recover in terms of recovering capital costs, operating costs and expected return (incentives). Tariffs are structured in a way to allow this recovery. Are the tariffs reflective of the methodology we are trying to apply? Are the tariffs fair? What discounts should be considered?	• In relation to discounts, it would be worth considering approach taken by other EU countries which have introduced LNG discounts to enhance security of supply.

Relevant Objectives

a) Efficient and economic operation of the pipe-line system.

Our Understanding/ interpretation	Considerations for Entry/ Exit Split	Discussion Summary:
Pipeline operations and infrastructure are extremely critical for the country's functioning and growth. Economic efficiency implies a state in which resource is optimally allocated whilst minimising waste and inefficiency. Getting the right inputs a the lowest cost Considerations may include: • Fuel costs (compressors) • Personnel • Cost of service (capacity charges etc) • Maintenance • Investment • Data & information • Economies of scale (throughput) • Running of the network • Residual balancing • Commercial processes (e.g. capacity auctions)	Tariffs underpin the economic viability of the NTS. Ofgem set the amount of Allowed Revenue (via the Price Control funding model) we can recover in terms of recovering capital costs, operating costs and expected return. Tariffs are structured in a way to allow this recovery. Do the current arrangements promote efficient and economic operation? Would any amendment to the split enhance this objective if balance were to be more Entry or Exit? Would any consideration be needed in regards to any changes in booking & flow behaviours as a result.	• Economies of scale is a key consideration area – can throughput be increased. Would an amendment to the entry/ exit split lower the prices paid by large industrials making them more competitive • If transit gas could be encouraged, this could increase throughput and therefore reduce charges • Question if we should be considering greater use given the drive to net zero. • This objective is relevant for a charging discussion.

Transmission Services Charging:
Future Developments

NTSCMF Discussions: Next Steps

July 2024

Next Steps

We welcome reflections on what has been presented so far and how we take it forwards.

To date the discussions on reviewing the impacts of a different Entry / Exit split have incorporated:

- High level analysis on a number of options
- Relevant Objectives discussion on potential change
- Charging Relevant Objectives on potential change
- Consumer Benefits/Impacts and how this is potentially measured
- Identify areas where further investigation may be helpful

For August's NTSCMF, we propose to bring together the discussion to date and summarise reflections on the above elements in one piece in the area of potentially changing the Entry and Exit split. This can include any further analysis or updates based on feedback at July's NTSCMF or on July's material.

Beyond August, there may be more to reflect on as the discussions advance and we welcome Stakeholder views as at all times, Stakeholders input through NTSCMF or direct, will be invaluable.

Indicative Timeline

January 2024

Set out structure of discussions via NTSCMF

February 24 onwards

Options will be discussed and developed through a standing NTSCMF agenda item

Autumn 2024

Raise potential UNC Modification

Autumn 24 - May 25

UNC Modification Workgroup development

June 2025

UNC Modification for consultation

July 25 - January 26

Ofgem to complete impact assessment if required and make decision on Proposal

January 2026

Approval required by May 2026 for October 2026 implementation

October 2026

Aim to implement changes to come into effect for the prices applicable from 01 October 2026

The above dates are indicative only. The outcome of discussions will inform the plan going forwards.

Thank you

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national gas transmission